MICRO - COMPILER

(English translation of this manual by C16-Chris & S_/S 2005)

Cover

Compiled Programs run 50 or 60 times faster

Page 5

1 Entry

The following BASIC program will fill the screen with 1000 “A”

```
10 FOR V = 3072 TO 4071
20 POKE V , 1
30 NEXT
```

Please type in this program in your C16/C116/Plus4
This program can be executed by Basic in 5 seconds
If you compile this program with Micro-Compiler it will run 50 times faster so you can’t see the filling of screen (made in 1/10 second).
That’s what Micro-Compiler can do ☺

Page 6

2. Loading instruction

Please insert Micro-Compiler Disk in your Floppy-drive, then press (SHIFT) and (RUN-STOP).
The program starts and soon you can see the Title-screen.

Page 7

3. Working with Compiler

3.1 Enter the File Name

Press (RETURN) to leave the Title-screen
The Compiler asks now for the program filename.
Your program to be compiled, must be on the inserted floppy.
(Please don’t work with the original Micro-Compiler disk)

3.2 Input Start-address

Now you must type in the Start-address.
The program could conflict with produced code if you set a value from $1000 to $2600.
Set as start-address $3000 or more

3.3 Compiling a program

The program is going to be compiled; you can see processing.
After compiled, system returns an exit/error code, and shows beginning and ending addresses for your compiled program.

3.4 Run a compiled program

You can run your program by: SYS start-address-in-decimal
You can use the start-address from Basic by converting it into decimal by PRINT DEC (“start-address”)

3.5 Save a compiled program

You can save the compiled program by MONITOR (RETURN) S “NAME” 8 start-address end-address. Look in your User-guide for more info.

3.6 Load a compiled program

You can load the program by LOAD “NAME” ,8,1

4 Programming in Micro Basic

4.1 Commands

Micro Basic accepts 13 commands:

LET Variable = Value
PRINT (Value)(CHR$(Value))(“STRING”)(“;)
IF Value or Value THEN...
FOR Variable TO Value (STEP Value) ... NEXT
PEEK (Value)
POKE Value , Value
SYS Value
GOTO Line-number
RETURN
END
STOP
REM (anything you want)
WAIT

4.2 What you must look for at programming

- Variables must be different at the first letter
- You must not use strings

- Range of Variables’ values must be from -65535 to +65335
- You can not use the Print-Command with negative Values, it works with only two bytes. If you want to work with negative numbers you must use Variables.
- Accepted operands: + , - , * , / , AND , OR , PEEK( ) .
- Processing works from left to right step by step, thus you are not allowed to use ( ).
- You can use symbols (,) , = , ()
- You can apply cycles FOR / NEXT
- “THEN Number” syntax is not allowed, you must enter “THEN GOTO Number”
- You can use POKE 239,0 : WAIT 239,1

4.3 Practicable programming in Micro-Basic

When you program in Micro-Basic you have not all Commands.
Many BASIC commands can be built using combinations of Micro-Basic Commands.
Don’t use COLOR-command; use POKE inserting color-code in Memory-address 65301- 65305.
In your user-guide you can find the addresses.

5 Mixing of Micro-Basic Compiled and Basic 3.5

Page 11

5.1 All

You can mix Compiled and Basic programs really easy.
If you want to insert the Compiled code in your Basic 3.5 program type:

10 COLOR 0 , 5 , 4 : SYS 16384 : PRINT . . . . .

5.2 Loading a Compiled-program

The Compiled program must be loaded (,8,1) into machine before executing it by SYS
Warning: there is a bug in O.S.: if you load it from a program like:

10 LOAD “compiled“ ,8,1

then system enters into an endless loop. To avoid this you must operate as follows:

10 IF A = 0 THEN A = 1 : LOAD “ compiled “ ,8,1

5.3 Parameters supplying

You can exchange Variables between Basic 3.5 and compiled-files by using:
POKE and PEEK .

End of manual